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COLONY OF THE GAMBIA

THE REPORT

OF THE

DEPARTMENT OF AGRICULTURE

For the Period ending 31st May,

1939

Price : Two Shillings

BATHURST :
PRINTED BY THE GOVERNMENT PRINTER.

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The Report of the Department of Agriculture, for the period ending 31st May, 1939.

SECTION 1. AGRICULTURE IN THE COLONY AND PROTECTORATE.

Meteorology.

1. *Weather.*—During the year under review, the rainfall was generally below the average, but as the rains were regular once they started the lower rainfall caused no damage to crops. The rains commenced in May but during June there was a period of drought for some 14 days which rather hindered the earlier planted crops.

The meteorological records are found in Appendix 1.

Food Crops.

2. *General.*—The Gambian farmer has been notorious in the past for devoting the greater part of his attention to the cultivation of groundnuts for export, and leaving the production of food crops chiefly to his womenfolk. This system was economically sound as long as a sufficiently high price could be obtained for the groundnut crop which enabled the farmer to supplement the supply of home grown foods by the purchase of imported foodstuffs. Unfortunately during the last two years, the price of oilseeds has remained low, so much so, that a farmer growing groundnuts as his main staple has found himself unable to supply the wants of his family with the proceeds from his crop and in many cases the farmer has gone through a period of extreme want. This second year of poor prices for oilseeds has driven home to the farmer the necessity of providing sufficient food for his family far more effectively than all the propaganda that has been undertaken during the year. On this account it may be said therefore that the local food situation is much better than it has been for several years past. Even so, there is still room for improvement in the situation if the Gambian farmer is to be a self-supporting individual.

3. *Grain Crops.*—Crops of millet and guinea corn were much larger than in previous years, and fair average yields were obtained. In a few instances it was noted that the whole activities of the farmer had been concentrated on these two crops instead of on groundnuts as previously. It is only fair to remark that these were cases of individuals who would be likely, owing to their position, to receive more demands upon them than would be the case with the average peasant.

Rice was reported to have been grown over larger areas than formerly and it was observed that men and women were in the ricefields as late as February, trying to harvest the crop before it had shed through over-ripeness, and failing to do so. As rice growing is womens' work in the Gambia, it would appear that the amount of rice they are able to produce will soon reach its maximum point, unless the men are prepared to assist in the cultivation. The introduction of newer, heavier yielding varieties may mask this point for some time. The greater majority of the men however continue to display a marked reluctance to assist their women in the swamps.

4. *Root Crops.*—Cassava and sweet potatoes are being grown in increasing quantities, especially the former which is so easy to grow, and it is being realised by the people that these crops can form a valuable addition to their food supply.

5. *Leguminous Crops.*—There is a great need of leguminous crops in the country as the people much prefer to sell their groundnuts than to eat them. To meet this need the pigeon pea was introduced some years ago but it did not take very well. This appeared to be because the people did not know how to prepare the grain properly and a recent demonstration of a proper method has aroused considerable interest. These demonstrations are to continue.

6. *Dry Season Gardens.*—Far more attention has been paid to the small native gardens this year in which crops of native tobacco, spinach, bitter tomatoes and pumpkins have been grown. These gardens are never large but form a source of food supply which is most important, and now that the practice has commenced it may be possible to push dry season gardens with more hope of success, and to introduce more exotic crops.

7. *Village Citrus Plantations.*—The plantations are being continued in the South Bank Province, and there is a constant distribution of fruit trees to the villages throughout the Gambia. It will be some years before these plantations will have an effect on the food supply.

Export Crops.

8. *Groundnuts.*—There is little doubt that a decreased acreage was planted under this crop during the year. This was due in part to the low prices for groundnuts the previous season and also to the fact there was increased planting of foodstuffs. The yield given by the crop exceeded expectations as the season throughout was very favourable but a little late. The standard of the crop has risen on account of the propaganda undertaken regarding early planting and to the enforcing lifting of the crop before specified dates. Occasional parcels of adulterated nuts are found and it is always discovered that they are the result of an infringement of the foregoing orders.

The average figures of analysis to hand of the shipments of groundnuts are :—

Dust	·528%
Foreign matter	·692%
Excess shell	·497%
Bad kernels	·925%

Legislation has been introduced whereby an inspector can order the re-conditioning of nuts other than by rescreening. It is not yet possible to stop the buying of nuts when re-conditioning is taking place, or to order the destruction of nuts so insect ridden or rotten as to be useless for export.

9. *Palm Produce.*—An excessive amount of shell is still found in the palm kernels offered for sale, and this is likely to continue until legislation is introduced to control it. When the potentialities of the palm tree are considered in the Gambia, it is amazing to find that so little use of it is made by the inhabitants. The major portion of the people collecting palm produce are strangers from neighbouring foreign territories who reside in the Gambia for the season only. Recently a new order has been made in the South Bank Province whereby Gambian natives are allowed a free permit to collect palm produce, whilst strangers must still pay the old fee. There are indications that a more active interest in the oil palms is being taken since the introduction of this order.

Mention was made in last year's report of the introduction of nut cracking machines for dealing with palm kernels. Unfortunately this machine has not proved a success as the agent was unable to come to terms with the producers over payment for use. With the machine itself, a minor difficulty was the regulation of the speed necessary for cracking shell with different parcels of nuts without damaging a great amount of the kernel.

10. *Beeswax.*—The prices ruling for beeswax were a little higher than those of the year before, but they are not as high as those offered in neighbouring territories with the natural result that much Gambian wax does not appear in the export figures of the Colony.

11. *Shea Nuts.*—The village plantations set up three years ago show that a varying amount of interest has been taken in them. Where they have been well looked after, the stand averages between 19% and 22% but elsewhere there is complete failure.

Those areas that have received attention will have a further supply of seed issued for filling up the blanks.

12. *Recent Introductions.*—Thanks are due to the Director of Agriculture, Nigeria, for supplies of Ishan and Allen cotton, green gram, two new varieties of groundnuts and teff grass.

Exports of Agricultural Products.

13. *Exports.*

The principal Agricultural Products exported for the years 1934 to 1938 are as follows :—

	1934.		1935.		1936.		1937.		1938.	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Groundnuts ... (Undecorticated)	Tons. 71,919	£ 387,345	Tons. 45,110	£ 368,887	Tons. 49,654	£ 427,317	Tons. 66,576	£ 646,635	Tons. 46,204	£ 240,872
Groundnuts ... (Decorticated)	—	—	—	—	—	—	508	6,954	777	5,819
Palm Kernels ...	tons. 553	2,712	tons. 643	4,223	tons. 626	4,858	tons. 861	7,558	tons. 681	4,535
Hides & Skins...	lbs. 141,511	1,978	lbs. 93,181	1,060	lbs. 116,306	1,839	lbs. 109,108	1,855	lbs. 12,973 (a)	262
									cwt. 824 (b)	1,698
Beeswax ...	lbs. 59,826	1,404	lbs. 63,989	1,541	lbs. 32,573	909	lbs. 35,424	1,140	lbs. 49,331	1,845

In this report the English long ton of 2,240 lbs. and bushel of 28 lbs. are used. All weights and measures are of the English standard.

(a) skins
(b) hides

Livestock.

14. *General.*—Since the census of 1937, it will be noted that there has been a serious decrease in the numbers of donkeys and goats in the country, though the decrease in goats is offset by the increase in sheep. As donkeys are used as transport animals it is not unnatural to find a decrease in their numbers when the increase in lorry traffic throughout the Protectorate is considered.

The decrease in the number of cattle is 648, compared with last year, but this is more than accounted for by the heavy mortality due to rinderpest in the South Bank and North Bank Provinces, where over 2,000 cattle died during the epidemic.

15. *Economic Position.*—As in general throughout the greater part of West Africa, cattle are regarded by their owners as a form of wealth, and it is with reluctance that they are sold. Even though the work of the inoculation unit is bearing fruit, as can be seen in the Upper River Province, where the numbers of cattle have risen from 8,791 to 11,658 since the work of the unit started there is still no appreciable increase in the number of cattle offered for sale. It would appear that the cattle owners have not yet satisfied their craving for cattle, and until they do so, and have cattle they are prepared to sell, cattle products will not form an economic proposition in the Colony.

16. *Statistical Position.*—The statistical position of livestock in the Gambia is given in Appendix 2.

17. *Animal Husbandry.*—There is no change in animal husbandry to be reported during the year. The feeding of stock does not give rise to any great difficulty, because during the rains there is amply fodder to be found in the bush surrounding the villages, and during the dry season the swamps form a source of succulent fodder.

18. *Changes of Policy.*—During the past year a grazing fee has been charged on all cattle, but Government is now considering the modifying or abolishing of these fees and the possible substitution of another form of tax.

Forestry.

19. *Forestry Committee.*—The Forestry Committee mentioned in last year's report met twice during the period under review. It is expected soon to be in a position to make recommendations to Government.

20. *Forest Reserve.*—A Forest reserve has already been created in one province, whilst in another all trees of which the fruit and leaves are used for food are prohibited to be felled or destroyed. Throughout the country the early burning of grass is enforced to protect forest growth.

Pests and Diseases.

21. *Locusts.*—No swarms of locust have been reported during the year, and the hoppers seen were in small bands which were dealt with by their natural enemies. Cattle egrets were prominent in destroying the bands.

22. *Rosette Disease.*—There was very little disease in the country during the year. Isolated cases of infection were reported and dealt

with, and these were nearly all cases of isolated plants. There is no doubt that the ideal growing conditions did much to keep the disease under control.

23. *Striga Senegalensis.*—This parasite continues to be a major pest on guinea corn and millet farms, and is one of the causes of farms being abandoned. Pulling of the parasite has been ordered in certain areas but it is difficult to enforce. When pulling is practised, it is often done too late in the season to be of practical benefit.

24. *Rinderpest.*—Until the arrival of the Veterinary Officer and the commencement of the inoculation camps, the disease took heavy toll of cattle in South Bank Province. Over 600 cattle died in 1937 and more than 2,000 were reported in 1938. Smaller outbreaks have been reported elsewhere in the country, but never on the same scale as in South Bank Province. There is no doubt the disease is being constantly introduced from neighbouring territories where no control appears to be practised and the continuation of these camps will be necessary. The whole of the Gambia has now been covered once by the inoculation unit, and the cycle will re-commence in 1940. The attitude of cattle owners has been undergoing a marked change to inoculation compared with the indifference shown at the commencement of the scheme.

Staff.

25. *General.*—The Department has again divided its energies into groundnut inspection during the Trade Season, and demonstration and experimental work during the rains. The staff engaged on produce inspection was two Europeans and ten Africans out of a total complement of two Europeans and thirteen Africans. It was unfortunate during the period under review that the European staff was hampered greatly by sickness and the incidence of leave. It was therefore extremely difficult to supervise departmental activities in all districts especially as the African staff has to be trained in its duties as it is necessarily recruited from a type that has little agricultural background. It is quite evident that the success of the work of the Department ultimately depends on the African staff and therefore their training is a matter of greatest importance. The staffing and changes are listed in Appendix 4.

SECTION II.

Work of the Department.

District Work.

26. *Groundnut Inspection.*—The introduction of new legislation in February, 1939 has given the Department greater powers than formerly. Under the old ordinance it was only possible to order dirty or adulterated nuts to be re-screened, but now hand picking or re-conditioning by any other means can be ordered. This has got over the difficulty of nuts remaining adulterated with sticks and stones, no matter how often the nuts were passed through the rotary screen. No complaints have been received from Europe or from the traders concerning the working of the amended Ordinance.

During the rains the crop was inspected for rosette disease, and where necessary, action was taken. Towards harvest time, the crop is inspected again to see that no infringements of the stacking and staging orders have taken place, and that no nuts are lifted before the specified time.

27. *Shea Nuts.*—The plantations set up in 1937 have all been inspected during the period under review, and it has been decided that all gaps be filled up in those areas where the plantations have been cared for. Village heads and district Chiefs have needed constant urging to keep up their plantations, and this will be necessary until such time as the people see a return from them.

28. *Hides and Skins.*—The inspection of hides and skins is constant all the year round in Bathurst, but it only affects those skins bearing a market stamp. Very few complaints are received, but when they are, an inspector is sent to the market from which the faulty hides come, to demonstrate to the butcher the correct method of flaying.

29. *Improvement of Native Food Supply.*—It has been mentioned previously that at certain times of the year, the Gambian peasant has often suffered from lack of food, and it has been the main work of the Department to see that this condition is remedied. That the position today is better than formerly is not in doubt, but the reason is to be found more in the continued low prices for export crops than in any Departmental action that has been taken up to now.

30. *Irrigation.*—It has been conclusively shown on the experimental and demonstrational irrigation areas that it is possible to grow far more food, chiefly rice, than is done under the present methods used by the people. Unfortunately the layout of an irrigated area needs considerable labour, which the women alone cannot supply; and it is the women alone who do any work in the swamps; for the men are very loath to undertake this type of work at all. Progress is therefore slow as it has to wait for the men to decide that they will help their womenfolk in the construction of the area. There are now five irrigated areas in the country where crops of rice, sweet potatoes, yams, tomatoes, peppers, onions and bitter tomatoes are raised compared with two the previous year. It will only be possible to apply this method in certain areas, where a constant flow of water is assured the whole year round. The areas could be increased if a more general use of the well sweep or " shadoof " was practised, but this has not yet proved popular.

31. *Rice Seed.*—The introduced varieties of rice, especially G.E.B. 24 and G.C. 79 have proved very popular. The Department raised 5,011 lb. of seed during the year. The demand for the improved varieties far exceeds the supply, even although the villages increase their supply by their own schemes.

32. *Economic Trees and Plants.*—During the year, Cape St. Mary station has been devoted to the raising of fruit trees to augment the food supply, whilst Wuli station in the Upper River has been used for the raising of plants for distribution. A complete summary of the trees and plants issued is given in Appendix 3.

33. *Propaganda.*—Propaganda is undertaken in conjunction with touring and inspection and covers dry season gardens, the improvement of bee-hives and the correct methods of flaying and drying the hides of animals slaughtered. The main point stressed is the encouragement of the people to grow more food, and this is being pushed not only by the Department but by the Commissioners also. As mentioned previously, this is beginning to bear fruit, but low produce prices have done much to help.

34. *Co-operation.*—A start has been made in one village to sell their groundnuts on a co-operative basis. The effort has met with con-

siderable opposition from the traders and middlemen, but in spite of this opposition 16 tons of groundnuts were marketed with very satisfactory results to the participants. The produce offered was much cleaner than the average of Gambian groundnuts, but the trade refused to give a premium for these quality nuts, and the gain in price has been on savings on transport, due to dealing in bulk lorry loads.

Experimental Work.

35. *General.*—There is only one experimental station in the Gambia at Yoroberi-kunda in MacCarthy Island Province. It has been rather unfortunate that during the year the station had to be without a European officer for the early part of the planting season, due to the previous officer being invalided through sickness and his relief not arriving until the 26th June, 1938.

36. *Groundnuts.*—Owing to the importance of the groundnut in the export trade of the country, much work is done on this crop. Lately work has been confined to the trial of various varieties with a view to their general introduction. Of all the varieties tried, only one, Sir Charles from Nigeria, has proved itself to be better than the local variety, and this is now being planted for increase, preparatory to general distribution.

37. *Cotton.*—The only cotton tried has been Cambodia cotton, introduced from India; but during the last year Allen cotton and Ishan cotton have been introduced from Nigeria and will be tested. It is unlikely that cotton will ever displace groundnuts in the economics of the country, but in some villages there is a small but thriving cotton weaving industry. It is chiefly on this account that cotton is being tried and tested.

38. *Maintenance of Soil Fertility.*—Each year continues to demonstrate the value of Farm Yard Manure, even in small dressings of from 1 to 3 tons per acre. The increase over the controls where no manure is applied is as follows:—

for a 1 ton dressing	34% increase.
for a 2 tons dressing	55% increase.
for a 3 tons dressing	72·5% increase.

Composting has been carried out and is quite successful but it is of no advantage where cattle can be kept, as the labour involved in cutting the stalks of guinea corn and millet and the turning and watering of the heaps, is far greater than that of bedding down the animals with the material, and letting them do all the work.

39. *Animal Husbandry.*—The arrival of an officer from Northern Nigeria has enabled a start to be made in mixed farming, by which is meant the farming of an area of land permanently, with the aid of cattle. In spite of the late start occasioned by the late arrival of the officer concerned, it is gratifying to note that in the first season the farmer was able to cultivate ten acres of land, and that with the rice farm of the farmer's wife, a food supply for four persons for 339 days was raised. In addition one ton of groundnuts was grown for sale.

The arrangement of the farm and the rotation of crops was revised in the light of other experience of Gambian conditions, and the whole question is now undergoing investigation. There is much work to be undertaken before mixed farming can be generally introduced to the peasants. Experiment must be made to discover the most suitable

rotations, the best type of implements for cattle draft, and above all the susceptibilities of the cattle to work. The last mentioned is the most hard to solve. The cattle can stand up to conditions when a European is in charge, but when left to the native, the mortality is apt to be high. This is generally due to trypanosomiasis, as the cattle are normally very resistant to this disease, but succumb at once if they are allowed to lose condition.

This may be overcome by supplementary feeding with grain, and perhaps light groundnuts. Unfortunately the cattle do not appear to care for these once there is an abundance of fresh grass, upon which alone they cannot properly maintain themselves and work.

Veterinary District Work.

40. *Disease Control.*—The Veterinary Officer is only in the Gambia during the dry season and work is confined to the inoculation of cattle against rinderpest. The following table shows the number of cattle that have been treated since the inception of the scheme in 1933.

1933-34	454 cattle.
1934-35	1,546 cattle.
1935-36	2,800 cattle.
1936-37	10,768 cattle.
1937-38	8,570 cattle.
1938-39	11,832 cattle.

With the closing of the inoculation season in June, 1939, the whole of the Gambia will have been covered once.

41. *Disease Prevention.*—During the rains the African staff are employed in surveying the next areas due for inoculation, and very often come across small outbreaks of rinderpest. In these cases a standstill order is made and the staff see that the quarantine is rigidly enforced. There is no doubt that it was due to the excellence of their work, that the outbreak of rinderpest in South Bank Province last year did not spread into the Kombo districts, where the herbs had a very high susceptibility to disease, and result in serious loss.

Improvement in Marketing.

42. *Hides and Skins.*—The continuation of the hides and skins improvement scheme was undertaken during the year. Although the quality of the hides from the centres undertaking improvement continues high, yet there is no indication of the improvement spreading into the villages in the provinces. Many hides are now reported to be taken to neighbouring territories where a higher price prevails even for the ordinary hide dried on the ground, and this is militating against the spread of the improvement scheme.

43. *Ghee.*—As mentioned in last year's report, the ghee manufacture started at Gungur has continued throughout the period under review. Manufacture was in excess of that of last year owing to the concentration of cattle in the vicinity for inoculation against rinderpest, and 9 cwt. were exported. It is not likely that the exports will ever be large, as there is a big demand for the product in the towns. The development of the trade is slow and will continue to be so until the number of cattle in the Gambia is such that animal products can be offered for sale in excess of the local demand. It has been estimated that another three years must elapse before this stage is reached.

SECTION III.

44. *Finance.*—Departmental expenditure for the year 1938 was as follows :—

		£	s.	d.
1—7.	Personal Emoluments	3,170	14	5
8.	Sea Passages	194	18	0
9.	Transport Allowances	68	11	2
10.	Travelling Allowances	56	12	8
11.	Transport	330	2	6
12.	Sundries	60	13	10
13.	Plants, Seeds and Fertilizers	15	11	2
14.	Labour	1,095	17	3
15.	Technical Library	3	17	7
16.	Tools, Implements and Machinery ...	52	15	1
17.	Upkeep and Planting Botanical Gardens, etc. ...	34	1	4
18.	Paddy Improvement and Dry Season Cultivation	195	3	3
19.	Purchase of Cattle	29	0	0
	Total	£5,307	18	3

Departmental revenue credited to Sales of Agricultural Produce for 1938 was £41 4s. 2d.

45. *Veterinary Services.*—The expenditure in connection with Veterinary services during the year 1938 is as follows :—

		£	s.	d.
i.	One Veterinary Officer	441	18	9
ii.	Voyage and leave salary etc.	83	5	8
iii.	Commuted travelling and transport allowances etc.	105	0	0
iv.	One Laboratory Assistant	85	4	10
v.	Six Veterinary Assistants	119	2	6
vi.	Compensation and maintenance of animals used for production of serum.	193	5	3
vii.	Purchase of instruments etc.	153	15	8
viii.	Transport	79	10	9
ix.	Sea Passages	137	14	7
x.	Sundries	38	3	1
	Total ...	1,437	1	1

SECTION IV.

46. *Summary of Legislative Changes.*—An Ordinance to amend the Adulteration of Produce Ordinance, 1924, Cap. 107, was passed in March, 1939, and approved as follows :—

(*a*) by deleting the word " re-screened " in the last line of section 4 and by substituting therefor the words " cleaned by re-screening, hand picking or other means ".

(*b*) by the repeal of paragraph (*d*) of section 5 and the substitution therefor of the following paragraph :—

" (*d*) Having purchased or stored groundnuts for export shall fail to cause such groundnuts to be cleaned when ordered to do so under the provisions of section 4 by the Director of Agriculture or any officer of the Agricultural Department authorised by him."

J. D. TALLANTIRE,

Acting Senior Agricultural Superintendent.

12th July, 1939.

APPENDIX I.

Rainfall records of five stations are given below. Bathurst and Cape St. Mary (coast stations) Kerewan (lower middle river) Yoroberi-kunda (middle river) and Wuli (upper river).

1938.	Bathurst	Cape St. Mary	Kerewan	Yoroberi-kunda	Wuli
June ...	0·08	0·02	0·44	2·90	4·12
July ...	10·92	7·54	10·71	8·41	10·88
August ...	16·32	17·54	16·65	8 32	14·06
September	13·53	12·39	8·52	8·88	13·89
October ...	5·66	7·27	2·28	3·80	3 01
November	0·02	0·24	0·15	—	—
December	—	—	—	—	—
1939.					
January ...	—	—	—	—	—
February ...	—	—	—	—	—
March ...	—	—	—	Trace	—
April ...	—	—	—	—	—
May ...	—	Trace	0·06	Trace	0·13
Total ...	46·53	45·00	38·81	32·31	46·09

Temperatures are only available for the following stations :—

1938.	Bathurst.		Cape St. Mary.		Yoroberi-Kunda.		Wuli.	
Months.	Means.		Means.		Means.		Means.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
June	89·1	71·8	87·0	72·5	98·5	74·5	97	74·8
July	88·6	72·3	85·6	72·6	90·3	73·7	89	73·4
August	88·1	71·2	85·4	73·5	83·3	71·0	86·8	72·9
September ...	89·1	72·0	86·1	73·6	87·2	69·8	87	72·5
October	89·2	73·1	86·7	73·8	89·8	72 5	89 4	73·6
November ...	91·0	70·2	87·1	72·3	93	66	92	66·8
December	85·7	64·7	82·4	66·9	89·0	58·7	87·9	58·6
1939.								
January	87·3	64·4	74·3	62·8	94·1	57·8	92·4	55
February	88·9	64·2	83·2	62·6	93 2	62·0	97	58 7
March	89·3	66·2	8.21	65·0	96·8	67·1	98·4	67.1
April	88·9	66·6	79·6	64·9	104·2	69·3	99·1	72·1
May	88·8	68·1	81 3	67·5	102	71	84·03	71

APPENDIX II.

LIVESTOCK CENSUS.

1933, 1937 AND 1938.

PROVINCE.	CATTLE.			GOATS.			SHEEP.			DONKEYS.			HORSES.		
	1933	1937	1938	1933	1937	1938	1933	1937	1938	1933	1937	1938	1933	1937	1938
South Bank ...	9,794	15,557	13,899	27,044	20,277	16,399	12,440	10,440	16,399	882	805	634	53	49	46
North Bank ...	3,259	3,558	2,234	*(6,847)	9,118	7,371	recorded with goats.	2,267	2,473	394	486	242	66	44	22
MacCarthy Island ...	5,818	9,070	8,537	*(16,664)	12,256	12,385	do.	3,623	4,907	922	1,036	824	143	102	126
Upper River ...	6,496	8,791	11,658	*(17,396)	10,186	9,437	do.	3,875	4,073	2,703	2,259	1,955	366	326	362
Totals:— ...	25,367	36,976	36,328	—	51,837	45,592	—	20,205	27,852	4,901	4,586	3,655	628	521	556
Increase or decrease 1937/38.		--	648		—	6,245		+	7,647		—	1,431		+	35

*Sheep and Goat inclusive.

APPENDIX III.

Distribution of Plants and Seeds.

The following were distributed from the various Agricultural Stations free of charge, during the period under review :—

(*a*) Economic Fruit Trees.

Citrus spp.	8,994.
Mangoes (var.)	644.
Avocado Pears	64.
Various	1,758.
(*b*) Decorative plants various	8,237.
(*c*) Food Crops.	
Selected Rice	5,011 lb.
Groundnuts	132 bushels.
Garden Egg	775 plants.
Onion Seed	4,643.
Pepper " (var.)	4,719 plants.
Tomato (var.)	2,862 plants.
Pumpkin	37 oz.
Sweet Potato Slips	70 bundles.
Pigeon Pea seed	292 lb.
Setaria italica	134 lb.
Cassava Sticks	2,342.
Findi (Hungry grass)	200 lb.

APPENDIX IV.

Staff of the Department of Agriculture.

Senior Agricultural Superintendent	F. W. Hall.
Agricultural Superintendents	J. D. Tallantire, B.SC., L. H. Saunders. (one vacancy).
3rd Grade Clerk	R. C. Camara.
3rd Grade Overseers	G. D. Edwards, S. Dibba, J. Touray, K. B. Jarmeh and M. B. Jagne.
3rd Grade Storekeeper	J. E. Mungo-Lusack.
Agricultural Assistants...	S. T. Rendall, J. Lloyd, R. Lloyd, A. M. Jallow, J. C. Jatta, D. Jack, O. B. Joof and T. Morrison.

The principal staff changes during the period under review are as follows :—

Mr. F. W. Hall, Senior Agricultural Superintendent, arrived in the Colony from leave of absence on 6th October, 1938, and resumed duties at the new headquarters office, Georgetown, MacCarthy Island Province. Unfortunately owing to ill health he was invalided to England in May, 1939.

Mr. J. D. Tallantire, Agricultural Superintendent, arrived on secondment from Nigeria in June, 1938, assumed the duties of Acting Senior Agricultural Superintendent until the arrival of Mr. F. W. Hall, Senior Agricultural Superintendent, and then proceeded on leave in December, 1938. He resumed duty in May, 1939, and took charge of the Department on the departure of Mr. F. W. Hall.

Mr. L. H. Saunders, Agricultural Superintendent, in charge at Cape St. Mary and Lower River Agricultural stations, proceeded on leave of absence on 29th March, 1939.

Mr. G. D. Edwards, 3rd Grade Overseer, in charge at Wuli station, Upper River Province, proceeded on leave of absence on 30th November, 1938. At the expiration of his leave this station was handed over to Mr. R. Lloyd, Agricultural Assistant, and Mr. Edwards placed in charge at Cape St. Mary in March, 1939.

Mr. S. Dibba, 3rd Grade Overseer, remained in charge of the irrigation areas at Doniajoe and Berrending, North Bank Province during the period under review. He resigned his appointment on his being elected as a Chief of Central Baddibu, North Bank Province on 1st December, 1938.

Mr. M. B. Jagne, 3rd Grade Overseer, proceeded on leave of absence on 16th September, 1938, and resumed duty on 14th October, 1938.

Mr. J. E. Mungo-Lusack, 3rd Grade Storekeeper, proceeded on leave of absence on 29th June, 1938, and resumed duty on 30th July, 1938.

Appointments.

Mr. A. Barrow, Student, was appointed Agricultural Assistant, on 1st August, 1938.

Mr. T. Morrison, Student, was appointed Agricultural Assistant, on 1st March, 1939.

Termination of Appointments.

Mr. S. T. Rendall's appointment as Agricultural Assistant, was terminated on 31st August, 1938.

Mr. J. C. Jatta's appointment as Agricultural Assistant, was terminated on 15th May, 1939.